

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
20 October 2005 (20.10.2005)

PCT

(10) International Publication Number  
**WO 2005/097248 A1**

(51) International Patent Classification<sup>7</sup>: **A61M 16/20**

(21) International Application Number:  
PCT/SE2005/000493

(22) International Filing Date: 5 April 2005 (05.04.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0400890-0 5 April 2004 (05.04.2004) SE  
60/573,230 21 May 2004 (21.05.2004) US

(71) Applicant (for all designated States except US): **BREAS MEDICAL AB** [SE/SE]; Företagsvägen 1, S-435 33 Mölnlycke (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LJUNGBERG, Lars** [SE/SE]; Hästskovägen 18, S-448 34 Floda (SE). **TIEDJE, Mikael** [SE/SE]; Södra Ligården 2, S-425 30 Hisings Backa (SE). **BENGTSSON, Staffan** [SE/SE]; Spelmansgatan 4, S-416 52 Göteborg (SE).

(74) Agent: **VALEA AB**; Lindholmospiren 5, S-417 56 Göteborg (SE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

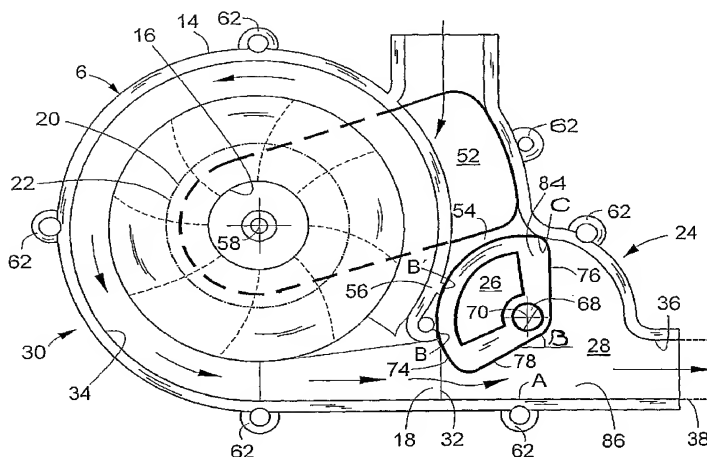
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CONTROL VALVE FOR A VENTILATOR



(57) Abstract: A ventilator (1) for supplying breathable gas to the airway of a patient with a respiratory disorder, comprising: - a gas flow generator (6) for generating a flow of said breathable gas to the patient, said gas flow generator (6) comprising a gas flow generator chamber (14) provided with a gas inlet opening (16) and a gas outlet opening (18); - a control valve (24) for controlling the flow and/or pressure of the gas distributed to the patient, said control valve (24) comprising a valve body (26) which is rotatably arranged about a rotational axis (70) within a valve chamber (28). The valve body (26) essentially exhibits the shape of a sector of a circle, in such a way that an arced first flow regulatory surface (74) is formed along the circular arc of said sector, and that second (76) and third (78) essentially straight flow regulatory surfaces, respectively, are formed along the two diverging sides of said sector.

WO 2005/097248 A1